



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

Am

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|-------------------------|---------------------|------------------|
| 09/967,111 | 09/28/2001 | Richard Francis Cormier | EMC01-11(01046) | 8094 |

7590 03/28/2005

Barry W. Chapin, Esq.
CHAPIN & HUANG, L.L.C.
Westborough Office Park
1700 West Park Drive
Westborough, MA 01581

| |
|----------|
| EXAMINER |
|----------|

HA, THANH T

| | |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

2194

DATE MAILED: 03/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/967,111

Applicant(s)

CORMIER ET AL.

Examiner

Ha Thanh

Art Unit

2194

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 September 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-30 are presented for examination.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 2, 8-9, 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- a. The following terms lack antecedent basis:

- i. Claim 2, "the computer device";
 - ii. Claims 8-9, "the step of initiating service operation";
 - iii. Claim 12, "the step of initiating operation" (i.e. does this refer to the step of "initiating service operation" in claim 1?)

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-30 are rejected under 35 U.S.C. 102(e) as being unpatentable over Young (U.S. Patent 6782531).
3. As to claim 1, Young teaches the invention as claim including a computer system, a method for managing services associated with a plurality of plug-in modules [abstract, lines 1-3], the method comprising the steps of:
 - obtaining identities of a plurality of plug-in modules [col. 6, lines 19-21];
 - retrieving a dependency list indicating respective plug-in services provided by, and required by, each plug-in module identified in the identities of a plurality of plug-in modules [col. 2, lines 57-61];
 - calculating a plug-in initiation order based upon the dependency list indicating respective plug-in services provided by, and required by, each plug-in module [col. 2, lines 59-65];
 - initiating service operation of plug-in modules according to the plug-in initiation order, such that if a first plug-in module provides a service required by a second plug-in module, the first plug-in module is initiated such that the service provided by the first plug-in module is available to the second plug-in module when required by the second plug-in module [col. 8, lines 36-38].
4. As to claim 2, Young teaches wherein the step of obtaining identities of a plurality of plug-in modules includes the steps of:

receiving a list of services to be started within the computerized device [col. 14, line 46];

determining, for each service in the list of services, a respective plug-in module definition that can provide that service [col. 14, lines 47-50]; and

placing the identity of each plug-in module definition determined in the step of determining into the identities of the plurality of plug-in modules [col. 13, lines 50-53].

5. As to claim 3, Young teaches wherein the step of retrieving a dependency list indicating respective plug-in services provided by, and required by, each plug-in module comprises the steps of:

for each plug-in module identified in the identities of a plurality of plug-in modules, performing the steps of:

instantiating the plug-in module based upon a plug-in module definition associated with the identity of the plug-in module [col. 13, lines 53-54];

receiving a dependency response from the plug-in module, the dependency response indicating respective plug-in services provided by, and required by, the plug-in module [col. 13, lines 50-53]; and

storing identities of the respective plug-in services provided by, and required by, the plug-in module as identified in the dependency response in the dependency list [col. 13, line 50].

6. As to claim 4, Young teaches wherein the step of instantiating the plug-in module comprises the steps of:

obtaining plug-in initiation information corresponding to the plug-in module definition associated with the identity of the plug-in module [col. 14, line 46];

instantiating the plug-in module based upon a plug-in module definition associated with the identity of the plug-in module [col. 14, lines 54-58]; and

passing the plug-in initiation information to the plug-in module for use by the plug-in module [col. 8, lines 31-32].

7. As to claim 5, Young teaches wherein the step of instantiating the plug-in module comprises the step of:

querying a dependency interface associated with the plug-in module with a dependency query to obtain the dependency response from the plug-in module [col. 13, line 61].

8. As to claim 6, Young teaches wherein the step of calculating a plug-in initiation order based upon the dependency list comprises the step of:

arranging a placement of each plug-in module identified in the dependency list within the plug-in initiation order such that plug-in modules not requiring services provided by other plug-in modules are placed earlier in the initiation order and such that plug-in modules requiring services provided

by other plug-in modules are placed later in the initiation order [col. 14, lines 47-52].

9. As to claim 7, Young teaches wherein the step of arranging placement of each plug-in module identified in the dependency list within the plug-in initiation order comprises the steps of:

analyzing the dependency list indicating respective plug-in services provided by, and required by, each plug-in module to determine which plug-ins provide services relied upon by other plug-in modules [col. 13, lines 41-44]; and

creating, as the plug-in initiation order, at least one plug-in module dependency tree based on the step of analyzing, the at least one plug-in module dependency tree containing a hierarchical arrangement of nodes associated with respective plug-in modules, the hierarchical arrangement indicating the plug-in initiation order of the plug-in modules respectively associated with the nodes in the dependency tree [col. 13, lines 44-49].

10. As to claim 8, Young teaches wherein the step of initiating service operation of plug-in modules according to the plug-in initiation order comprises the steps of:

traversing the at least one plug-in module dependency tree according to the

hierarchical arrangement of nodes and for each node encountered during the step of traversing, initiating service operation of the respective plug-in module associated with that node [col. 13, lines 53-59].

11. As to claim 9, Young teaches wherein the step of initiating service operation of the respective plug-in module associated with that node comprises the steps of: forwarding, via a dependency available interface associated with the respective plug-in module, a list of initiated plug-in services of other plug-in modules that are currently available for use by the respective plug-in module [col. 8, lines 31-38].

12. As to claim 10, Young teaches wherein the step of initiating service operation of plug-in modules according to the plug-in initiation order comprises performing, for each respective plug-in module in the plug-in initiation order, the steps of: determining, from a published list of services available by initiated plug-in modules, an identity of each initiated plug-in service required by the respective plug-in module [col. 7, lines 59-60]; forwarding to the respective plug-in module, via a dependency available interface associated with the respective plug-in module, the identity of each initiated plug-in service required by the respective plug-in module [col. 8, lines 31-32];

receiving a list of services initiated by the respective plug-in module [col. 8, lines 15-16]; and

adding the list of services provided by the respective plug-in module to the published list of services [col. 8, lines 17-18].

13. As to claim 11, Young teaches wherein the step of initiating service operation of plug-in modules according to the plug-in initiation order operates such that if the second plug-in module requires a service provided by the first plug-in module, the second plug-in module is initiated such that the service provided by the first plug-in module is available to the second plug-in module when required [col. 14, lines 23-37].

14. As to claim 12, Young teaches wherein the first plug-in module is initiated via the step of initiating operation of plug-in modules prior to initiation of the second plug-in module [col. 14, lines 15-23].

15. As to claim 13, Young teaches wherein the first plug-in module is initiated via the step of initiating operation of plug-in modules after initiation of the second plug-in module, and wherein the second plug-in module includes a wait-state operation causing the second plug-in module to wait to provide the service offered by the second plug-in module until initiation of the first plug-in module [col. 13, lines 28-30].

16. As to claim 14, Young teaches wherein the steps of obtaining, retrieving, calculating and initiating are performed by a multi-threaded plug-in manager and wherein the step of calculating a plug-in initiation order is performed by collectively operating a respective thread for each plug-in, each thread performing the step of initiating service operation of at least one plug-in module when all services required by that plug-in module are available [col. 14, lines 60-64].

17. As to claims 15-28, these are computer system claims that correspond to method claims 1-14. Therefore, they are rejected for the same reason as claims 1-14 above.

18. As to claim 29, this is computer program product claim that corresponds to method claim 1. Therefore, it is rejected for the same reason as claim 1 above.

19. As to claim 30, this is computer system claim that corresponds to method claim 1. Therefore, it is rejected for the same reason as claim 1 above.

Conclusion

Art Unit: 2194

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh Ha whose telephone number is 571-272-7220. The examiner can normally be reached on 8:00 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on 571-272-3756. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Thanh Ha
Examiner
Art Unit 2194

MENG-AL T. AN
SUPERVISORY PATENT EX
TECHNOLOGY CEN